



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,733	03/15/2004	Ralph Michael Fay	7388	1834
7590	10/18/2005		EXAMINER	
			BRUENJES, CHRISTOPHER P	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

LP

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/801,733	FAY ET AL.	
	<b>Examiner</b> Christopher P. Bruenjes	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 March 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-59 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 March 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20050224, 20050815</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

**DETAILED ACTION**

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-34 and 37-53 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/801,734. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-16 of '734 teach all of the limitations of claims 1-34 and 37-53 along with the limitation that the fibrous base sheet is Kraft paper. Therefore, because claims 1-16 of '734 are a specific example within the breadth of claims 1-34

Art Unit: 1772

and 37-53, claims 1-34 and 37-53 of the instant application are obvious over claims 1-16 of '733.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-5, 15-26, and 38-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitations "tested in accordance with ASTM Test Designation C1338-00", "D2020-92" or "G21-96" render the claims vague and indefinite because it is not understood if this method of testing is being claimed as being performed on the facing sheet prior to formation of the faced building insulation assembly or if the limitation is merely explaining the method used to arrive at the value or result claimed. Also, the limitations listed above contain standards, which may change

Art Unit: 1772

with time, and the test method is also not fully defined. The meaning of the phrase is therefore unclear.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 12-26, 31, 35-45, 50, and 54-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Symons (USPN 6,123,795).

Regarding claims 1, 12-13, 35, 37, and 54, Symons anticipates a sheet material comprising lignocellulosic material such as fiberboard (col.3, l.44-46) having a first major surface, a second major surface, and having an impregnating composition (col.3, l.25-26) containing asphalt (col.4, l.18-24) and a fungi growth-inhibiting agent or fungicide in amounts that result in the sheet material being fungi growth resistant (col.10, l.6-12). The impregnating composition is applied to the fibrous base material by coating one side or immersing the fibrous base material which would create a layer on both major

Art Unit: 1772

surfaces of the sheet (col.3, l.52-59). Regarding claims 2-5, 14-26, and 38-45, the Kraft paper sheet material exhibits no sporulating growth or non-sporulating growth because the Kraft paper sheet material contains a fungicide to eliminate fungi growth and when the impregnating composition is coated on one surface the second surface is essentially free of asphalt. Regarding claims 31 and 50, the sheet material consists essentially of the lignocellulosic fibrous base sheet and the asphalt layer that is substantially coextensive with the second major surface of the Kraft paper sheet because the fibrous base sheet is only coated with the impregnating composition, which is an asphalt layer, and the coating covers the entire fibrous layer. Regarding claims 36 and 55, the limitation that the asphalt containing sheet is a "roofing material" is a functional limitation in an article claim. Articles are defined by structure not the intended use of the article. Although all limitation are given consideration in article claims, a functional limitation is given only patentable weight insofar as what structure the limitation provides and whether the prior art article is capable of performing the function. In this case, the limitation that the sheet material is used in forming roofing provides no additional structure to the material and the

Art Unit: 1772

sheet taught in Symons would have the capability of being used as roofing material.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 6-8, 27-30, and 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Symons in view of Inoue (USPN 4,629,645).

Art Unit: 1772

Symons teaches all that is claimed in claims 1, 13, and 37 as shown above, but fails to explicitly teach the particular growth-inhibiting agent used or the concentration of that agent in the sheet. However, Inoue teaches that mold inhibitive materials including fibrous sheets used in building construction include mold or fungus inhibitive agents such as 2-(4-Thiazolyl) Benzimidazole (col.5, l.21-25) added in the range of 0.05% to 10% (col.5, l.55-57). 0.05% is within the claimed range. Inoue teaches that this agent is used in treating fibrous sheet material in building construction because of its safety durability, heat resistance, and being efficacious against mold (col.5, l.27-30). One of ordinary skill in the art would have recognized that Symons and Inoue are analogous insofar as both references are concerned with fibrous sheet materials used in construction materials for building construction.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to use 2-(4-Thiazolyl) Benzimidazole in a concentration of 0.05% of the sheet material as the fungi growth-inhibiting agent because it is a well known agent for that purpose and it has superior safety durability and heat resistance over other known fungi growth-inhibiting agents, and these properties are

Art Unit: 1772

necessary considerations when choosing the agent when employing them as building materials, as taught by Inoue.

5. Claims 9, 32, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Symons in view of Fischer et al (WO 01/72125 A2). Note US 2003/0100604 A1 has been used as the English equivalent of the PCT publication cited.

Symons teaches all that is claimed in claims 1, 13, and 37, as shown above, but fails to explicitly teach adding an odor-reducing additive to eliminate the odor emitted by the asphalt layer. However, Fischer et al teach that asphalt or bitumen used as a binder in a coating composition containing biologically active agents have odor-masking agents added to the asphalt or bitumen in order to mask or eliminate the odor emitted by the asphalt or bitumen. One of ordinary skill in the art would have recognized that in the art of coating compositions comprising biologically active agents and asphalt or bitumen binders, odor-masking additives are added to the asphalt or bitumen in order to eliminate odor that would otherwise be emitted by the asphalt layer, as taught by Fischer et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention

Art Unit: 1772

was made to add an odor-reducing additive in an amount sufficient to substantially eliminate odor that would otherwise be emitted by the asphalt layer to the asphalt layer of Symons, in order to mask or eliminate the odor, as taught by Fischer et al.

6. Claims 10-11, 33-34, and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Symons in view of Inoue and Beilfuss et al (US 2001/0021711 A1).

Symons teaches all that is claimed in claims 1, 13, and 37 as shown above, but fails to explicitly teach the particular growth-inhibiting agent used. However, Inoue teaches that mold inhibitive materials including fibrous sheets used in building construction include mold or fungus inhibitive agents such as 2-(4-Thiazolyl) Benzimidazole (col.5, l.21-25). Inoue teaches that this agent is used in treating fibrous sheet material in building construction because of its safety durability, heat resistance, and being efficacious against mold (col.5, l.27-30). One of ordinary skill in the art would have recognized that Symons and Inoue are analogous insofar as both references are concerned with fibrous sheet materials used in construction materials for building construction.

Art Unit: 1772

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to use 2-(4-Thiazolyl) Benzimidazole as the fungi growth-inhibiting agent because it is a well known agent for that purpose and it has superior safety durability and heat resistance over other known fungi growth-inhibiting agents, and these properties are necessary considerations when choosing the agent when employing them as building materials, as taught by Inoue.

Symons and Inoue fail to teach adding zinc pyrithione to the coating or impregnating composition. However, Beilfuss et al teach that when forming a microbiocidal composition, using one or more fungicides, zinc pyrithione is added to the composition in order to stabilize the composition (p.2, paragraph 22). One of ordinary skill in the art would have recognized that zinc pyrithione is added to fungicide containing compositions in order to stabilize the composition, as taught by Beilfuss et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to add zinc pyrithione to the coating or impregnating composition of Symons and Inoue in order to stabilize the fungicide composition, as taught by Beilfuss et al.

Art Unit: 1772

7. Claims 56-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fields (US 2003/0129899 A1) in view of Grubka (USPN 5,573,810).

Fields teaches asphalt containing sheet material comprising a base sheet comprising plastic fibers having a first major surface and a second major surface (see abstract). Note the limitation "polymeric film base sheet" taken to define its broadest reasonable interpretation is a base sheet comprising polymeric material, because film in its broadest definition includes fibrous layers and the broadest definition of polymeric would include composites containing polymeric material. An asphalt layer is coated on the first and/or second major surfaces and partially absorbs into the polymeric film sheet used in roofing (p.4, paragraph 30).

Fields fails to teach adding fungi growth inhibiting agent to the asphalt in order to render the asphalt containing sheet material fungi resistant. However, Grubka teaches that one problem commonly facing homeowners and other having asphalt shingle roofs, among other types of roofs, has been the growth of algae and fungus on the exposed surfaces of the roof. On a roof covered with asphalt shingles this problem manifests itself as severe discoloration of the exposed shingle surfaces (col.1,

Art Unit: 1772

1.64 - col.2, l.2). Grubka teaches that to combat this problem it is generally known to add fungi growth inhibiting agents to the asphalt attached to the asphalt containing sheet before applying to the roof (col.2, l.15-23). One of ordinary skill in the art would have recognized that fungi growth inhibiting agents are added to asphalt in asphalt containing sheet material in order to render the sheet material fungi resistant for use in roofing materials.

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to add fungi growth inhibiting agents to the asphalt of Fields in order to render the sheet material fungi resistant to prevent algae and fungus growth on the roof of the building the sheet is applied to, as taught by Grubka.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be

Art Unit: 1772

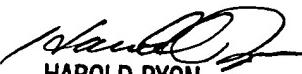
reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher P Bruenjes  
Examiner

Art Unit 1772

CPB  
CPB  
October 13, 2005

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

10/14/05